

ABSTRACT

Monofunctional polyfluorooxetane oligomers, polymers, and co-
polymers are prepared by the cationic polymerization of fluorooxetane
5 monomers with a monoalcohol. In addition to serving as an initiator,
the monoalcohol can also serve as a solvent for the fluorooxetane or
other monomers to produce oligomers, polymers, or copolymers having
low cyclic content. Suitable comonomers generally include various cy-
clic ethers. The polyfluorooxetane oligomer, polymer, or copolymer
10 having a single hydroxyl end group can be functionalized with a variety
of compounds so as to yield a functional end group such as an acrylate,
a methacrylate, an allylic, an amine, etc., with the functionalized oli-
gomer or polymer being suitable for use in radiation curable or thermal
curable coating compositions. These functionalized polymers can be
15 copolymerized and cured to provide improvements in wetting and sur-
face properties.